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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/511,762 | 10/19/2004 | Hiroyuki Katata | 1152-0311PUS1 | 6715 |
| 2292 7590 10/19/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | EXAMINER CHU, RANDOLPH I | |
| | | | ART UNIT 2624 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/511,762 | Applicant(s) KATATA ET AL. | |
| | Examiner Randolph Chu | Art Unit 2624 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10,13,15-20 and 25-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10,13,15-20 and 25-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 13 is objected to because of the following informalities: "joinedimage" in line 12 should be "joined image". Appropriate correction is required.

Response to Amendment

2. In response to applicant's amendment received on July 23, 2007, all requested changes to the claims and the specification have been entered.

Response to Argument

3. Applicant's arguments filed on July 23, 2007 have been fully considered but they are not persuasive.

Applicant's argue on page 16 of the response that the disclosure of Swift et al. fail to teach or suggest that a 2-dimentional display image is generated from the joined image data.

The examiner disagrees. The prior art of Swift et al. does disclose 2-dimentional display image is generated from the joined image data (Fig. 6, ref. no. 508).

Applicant's argue on page 16 of the response that the disclosure of Swift et al. fail to teach or suggest that a method representing how the left or right images is generated and coded.

The examiner disagrees. The prior art of Swift et al. can be embodied in the form of computer program code (para. [0073]).

Applicant's argue on pages 18 of the response that the disclosure of Swift et al. fail to teach that the header portions store information that represent the fact that the coded data constitute a stereo image and information represents a joining method of joining the plurality of image data.

The examiner disagrees. The prior art of Swift et al. disclose a script in VRR file (Fig 10, ref. no. 1002). The user can issue a command using a script to specify any viewing mode. All stereoscopic media files that are displayed on that web page are then dynamically switched to the new viewing method. Script commands to set the display mode to Color Anaglyph such as Stereo Image Parallel, Stereo Image Interleaved, and Stereo Image Interleaved. And anaglyph storage techniques, which are widely used on the Internet, combine the right and left images and then compressed the resulting image (para. [0051] and [0061]).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 10, 13, 15-18, and 25-29 are rejected under 35 USC 103(a) as being unpatentable over Yamamoto et al. (US Patent 6,784,917) in view of Swift et al. (US 2002/0122585).

With respect to claim 10, Yamamoto et al. teaches a joining means for joining the plurality of images data based on a predetermined joining method (Fig. 2 ref. no. 13a, 13b and 20; Fig 3); a coding means for coding a joined image data (Fig. 2 ref. no. 2);

Yamamoto et al. does not teach expressly that a 2-dimensional display image generating method coding means for coding a method of representing a 2-dimensional display image is generated from the joined image data.

Swift et al. teaches a 2-dimensional display image generating method coding means for coding a method of generating a 2-dimensional (monoscopic) display image generating method coding means for coding a method of representing a 2-dimensional display image is generated from the joined image data (para. [0027], Fig. 1 and Fig. 6).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to code 2-dimensional display image generating method in the method of Yamamoto et al.

The suggestion/motivation for doing so would have been that to provide seamless support for monoscopic (2D) viewing mode allowing delivery of said stereoscopic media in a normal 2D viewing mode.

Therefore, it would have been obvious to combine Swift et al. with Yamamoto et al. to obtain the invention as specified in claim 10.

With respect to claim 13, Yamamoto et al. teaches a decoding means for decoding the coded joined image data; (Fig. 7, col. 6 lines 59-65); a 2-dimensional display image generating means for generating a 2-dimensional display image, from the decoded joined image data based on the decoded information. (Fig 7, ref. no. 23);

Yamamoto et al. does not teach expressly that a demultiplexing means for extracting from coded data being input, the coded joined image data and information representing how a 2 dimensional display image is generated from the joined image data and a 2-dimensional display image generating method decoding means for decoding the information.

Swift et al. teaches a demultiplexing means for extracting, from coded data being input, the coded joined image data and information representing how a 2 dimensional display image is generated from the joined image data (Fig. 9 and 10, VRR file has script and plurality of information and in order to manipulate and display demultiplexing

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is required) and a 2-dimensional display image generating method decoding means for decoding the information. (para. [0027], Fig. 1).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to decode 2-dimensional display image generating method in the method of Yamamoto et al.

The suggestion/motivation for doing so would have been that to provide seamless support for monoscopic (2D) viewing mode allowing delivery of said stereoscopic media in a normal 2D viewing mode.

Therefore, it would have been obvious to combine Swift et al. with Yamamoto et al. to obtain the invention as specified in claim 13.

With respect to claim 15, the 2-dimensional display image is a miniaturized image for displaying a plurality of the joined images data in a menu representation (Fig 10, 1010 thumbnail).

With respect to claim 16, Yamamoto et al. teaches storing a plurality of coded images data corresponding respectively to a plurality of viewpoints; (Fig. 1 ref. no. 13a, 13b and 20; Fig 3);

Yamamoto et al. does not teach expressly that header information, in a predetermined format, wherein the header portion stores stereo image identification information that represents the fact that the coded data constitutes a stereo image made up of a plurality of images data and information that represents a joining method of joining the plurality of images data.

Swift et al. teaches header information, in a predetermined format, wherein the header portion stores stereo image identification information that represents the fact that the coded data constitutes a stereo image made up of a plurality of images data and information that represents a joining method of joining the plurality of images data. (Fig 10, VRR file, ref. no 1002, 1004, 1006 and 1008).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to store stereo image identification information in the method of Yamamoto et al.

The suggestion/motivation for doing so would have been that to provide seamless support for viewing mode allowing delivery of said stereoscopic media.

Therefore, it would have been obvious to combine Swift et al. with Yamamoto et al. to obtain the invention as specified in claim 16.

With respect to claim 17, Yamamoto et al. teaches storing a plurality of coded images data corresponding respectively to a plurality of viewpoints; (Fig. 1 ref. no. 13a, 13b and 20; Fig 3);

Yamamoto et al. does not teach expressly that an image data portion for storing encoded joined image data, encoded joined image data being generated by joining a plurality of images data corresponding respectively to a plurality of viewpoints and by encoding tile joined image data and a header portion for storing header information with respect to the encoded joined image data and header portion stores stereo image identification information that represents the fact that the coded data constitutes a

stereo image made up of the plurality of images data and information indicating a method of generating a 2-dimensional display image from the coded data.

Swift et al. teaches an image data portion for storing encoded joined image data, encoded joined image data being generated by joining a plurality of images data corresponding respectively to a plurality of viewpoints (Fig. 17) and by encoding the joined image data, a header portion for storing header information with respect to the encoded joined image data and header portion stores stereo image identification information that represents the fact that the coded data constitutes a stereo image made up of the plurality of images data and information indicating a method of generating a 2-dimensional display image from the coded data. (Fig 10, para. [0027] [0051] and [0061], Fig. 1).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to store stereo image identification information in the method of Yamamoto et al.

The suggestion/motivation for doing so would have been that to provide seamless support for monoscopic (2D) viewing mode allowing delivery of said stereoscopic media in a normal 2D viewing mode.

Therefore, it would have been obvious to combine Swift et al. with Yamamoto et al. to obtain the invention as specified in claim 17.

With respect to claims 18, Yamamoto et al. teaches header information is stored in the image data portion (Fig. 10).

With respect to claim 25, Yamamoto et al. teaches a joining means for joining the plurality of images data using a predetermined joining method (Fig. 1 ref. no. 13a, 13b and 20; Fig 3); and

Swift et al. teaches a 2-dimensional display image generating method coding means for encoding a 2-dimensional display method of representing how a 2-dimensional display image data is generated from the joined image data (para. [0027], Fig. 1), wherein the recording area (Fig. 10) includes:
an image recording sector for recording the joined image data or the 2-dimentsional image data (Fig 10, 1004, 1006); an audio recording sector for recording an audio data (Fig 10, 1012); and a subcode sector for recording an associated information (Fig 10, 1002).

With respect to claim 26, Yamamoto et al. teaches a joining means for joining the plurality of images data using a predetermined joining method (Fig. 1 ref. no. 13a, 13b and 20; Fig 3); and

Swift et al. teaches a 2-dimensional display image generating method coding means for encoding a 2-dimensional display image generating method representing how a 2-dimensional display image data is generated from the joined image data (para. [0027], Fig. 1), wherein the recording area (Fig. 10) includes an image recording sector for recording the joined image data or the 2-dimentsional image data (Fig 10, 1004,

1006); and a coded data of the 2-dimensional display image generating method is recorded in the image recording sector (Fig 10, 1002, para. [0027], Fig. 1).

With respect to claim 27, Yamamoto et al. teaches a joining means for joining the plurality of images data using a predetermined joining method (Fig. 1 ref. no. 13a, 13b and 20; Fig 3); and

Swift et al. teaches a 2-dimensional display image generating method coding means for encoding a 2-dimensional display image generating method of how a 2-dimensional display image is generated from the joined image data (para. [0027], Fig. 1), wherein the recording area (Fig. 10) includes an audio recording sector for recording an audio data (Fig 10, 1012); and a coded data of 2-dimensional display image generating method is recorded in the audio recording sector (Fig 10, 1002, para. [0027], Fig. 1).

With respect to claim 28, Yamamoto et al. teaches a joining means for joining the plurality of images data using a predetermined joining method (Fig. 1 ref. no. 13a, 13b and 20; Fig 3); and

Swift et al. teaches a 2-dimensional display image generating method coding means for encoding a 2-dimensional display image generating method of representing how a 2-dimensional display image data is generated from the joined image data (para. [0027], Fig. 1), wherein the recording area (Fig. 10) includes a subcode sector for recording an associated information, and a coded data of 2-dimensional display image

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generating image is recorded in the subcode recording sector. (Fig 10, 1002, para. [0027], Fig. 1).

With respect to claims 29, Yamamoto et al. teaches multiplexing to the coded data (fig 1. ref no. 3).

3. Claims 19-20 and 30 are rejected under 35 USC 103(a) as being unpatentable over Yamamoto et al. (US Patent 6,784,917) in view of Swift et al. (US 2002/0122585) and in further view of Iizuka et al. (US 2002/0054207).

With respect to claim 19 and 20 Yamamoto et al. in view of Swift et al. teaches all the limitations of claim 13 as applied above from which claim 19 and 20 respectively depend.

Yamamoto et al. in view of Swift et al. does not teach expressly that a display means capable of switching between a stereo representation and a 2-dimensional representation and automatic switching is done between the stereo representation and the 2-dimensional representation.

Iizuka et al. teaches a display means capable of switching between a stereo representation and a 2-dimensional representation and automatic switching is done between the stereo representation and the 2-dimensional representation (para [0233]).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to switch between stereo representation and 2D representation automatically in the method of Yamamoto et al. in view of Swift et al.

The suggestion/motivation for doing so would have been that when display device does not have capability to display stereo representation or user desired 2D image, switching to 2D image is desirable.

Therefore, it would have been obvious to combine Baxes with Edgar to obtain the invention as specified in claim 19 and 20.

With respect to claim 30, please refer to rejection for claim 19.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randolph Chu whose telephone number is 571-270-1145. The examiner can normally be reached on Monday to Thursday from 7:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished.

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RIC/

A handwritten signature in black ink, appearing to read "Matthew C. Bella".

MATTHEW C. BELLA
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